

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )  
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Amendment of Subparts B and F, Part )  
90 of the Commission's Rules to Permit ) RM 8734  
the Transmission of Safety Alert )  
Signals on Frequencies Used for )  
Non-Government Radar Operations )

To: The Commission

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REPLY COMMENTS  
OF  
COBRA ELECTRONICS CORPORATION

Cobra Electronics Corporation ("Cobra"), by its attorneys, pursuant to Section 1.405(b) of the Commission's Rules, hereby submits these Reply Comments in response to those Comments filed relating to the Radio Association Defending Airwave Rights, Inc. ("RADAR") Petition for Rulemaking. The RADAR Petition requests that the Commission promptly issue a Notice of Proposed Rulemaking, proposing to amend the Rules to permit the use and operation of a "Radar Traffic Safety Warning System" under Part 90 of the Rules. For the reasons set forth more fully below, Cobra supports the position taken in Comments by Applied Concepts, Inc. ("ACI") that further investigation is needed before such rule changes are proposed by the Commission. Specifically, Cobra submits that significantly more test data and analysis is necessary before the Commission should propose any amendment to its Part 90 Rules, and these results should be coordinated with applicable Federal and private agencies concerned with operations in this band.

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## **BACKGROUND**

Cobra has been engaged in the business of manufacturing consumer electronic devices for more than 30 years. Cobra is currently very active in the marketplace with its radar detectors, cordless phones, answering machines, and CB radios. Therefore, it is not surprising that Cobra has previously recognized the need stated in the RADAR Petition for a radar alert emergency warning system. Over a year ago, Cobra received certification for, and has been testing, a device which functions in much the same manner as the device described in the RADAR Petition, with a major exception -- the Cobra device is unmodulated and operates in accordance with the low power provisions of Part 15 of the Commission's Rules.<sup>1/</sup> The tests of Cobra's radar alert emergency warning system have been successful and the production phase has started. By the end of this year, Cobra anticipates approximately 5,000 of these devices will be in operation.

Cobra also wishes to point out that the operation of police traffic radar devices in the 24 GHz band has been the subject of extensive study. In March, 1982, the Department of Transportation's National Highway Traffic Safety Administration ("NHTSA") issued a report entitled "Model Performance Specifications for Police Traffic Radar Devices" (DOT HS-806-191). This report resulted from a 1976 resolution from the International Association of Chiefs of Police ("IACP") calling for more Federal

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<sup>1/</sup>Section 15.249 allows only 250,000 microvolts/meter at three meters.

involvement in, among other things, performance standards for speed measuring devices. In 1977, the NTHSA entered into an interagency agreement with the Law Enforcement Standards Laboratory of the National Bureau of Standards to develop such performance standards. Obviously, significant research, testing and analysis was undertaken by multiple agencies to develop standards for police traffic radar devices operating in the 24 GHz frequency band.

#### THE NEED FOR ADDITIONAL TECHNICAL DATA

No one disputes that there is a need, as set forth by RADAR, for devices which will make the Nation's highways safer. The Commission's inquiry cannot, however, stop at that point. The Commission's statutory mandate requires it to allocate frequencies, and authorize the use of those frequencies, in the public interest. This requirement involves detailed consideration of technical information. Unfortunately, the RADAR Petition, and nearly all of the Comments in support of that Petition, merely extol the virtues of the potential for providing additional safety for the motoring public; however, they fail to provide sufficient technical data to support the request. The only technically related materials provided are conclusory remarks that the devices proposed by the RADAR Petition will not cause harmful interference.<sup>2/</sup>

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<sup>2/</sup>For example, RADAR makes the bald assertion in its Petition that proposed RF transmissions "would be ancillary to radar speed measurement operations and would not cause interference to Government radiolocation service operations." (Petition, p.6) There is no technical showing for this proposition. Georgia Tech Research Institute makes a similar statement, with no technical (continued...)

Even if there were no other agencies involved with operations in this frequency band, the Commission should, at the very least, require extensive technical information prior to proposing a substantial Rule modification which has the potential of causing harmful interference to currently authorized operations. In this instance, such technical information is even more necessary so that other concerned agencies, e.g., the NHTSA and the IACP, can have an opportunity to review and analyze RADAR's proposed operations.

Cobra agrees with the position set forth in ACI's comments that the type of transmissions proposed in the band by RADAR "should be investigated prior to any rule change." See ACI Jan. 15, 1996 Letter to FCC, p.1. ACI makes this statement even though it believes, without technical support, that "the likelihood of harmful interference to existing users in this frequency band is small."<sup>2/</sup>

The overriding issue which must be considered by the Commission in this proceeding is the likelihood of harmful interference to existing services operating in the 24 GHz band. This bedrock requirement is of utmost importance in this proceeding

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<sup>2/</sup>(...continued)  
support, at p.4 of its filing, that "[t]he low powered nature of the Safety Warning Transmitter ensures that it can co-exist with police radars without the fear of mutual interference under normal conditions." Interestingly, there is neither an explanation of what constitutes "normal conditions," nor an explanation of what would happen under "abnormal conditions."

<sup>3/</sup>Cobra believes that there is insufficient data in the record to determine whether the operations proposed by RADAR would or would not cause harmful interference to existing, authorized operations in the band.

because operations in the 24 GHz frequency band, which have been the subject of extensive study by various Federal and private agencies, directly affect police and local government operations. Therefore, unwanted or harmful interference in this band could interfere with police traffic radar and other local government functions resulting in unusually dire consequences.

In order to assure interference-free operations, Cobra believes that first, detailed technical specifications of the proposed RADAR equipment and its operations must be provided to the Commission. Second, field testing by all authorized users of the band is necessary to determine the effects of the proposed RADAR operations in "real world" situations. Third, based on the results of field testing, it will be necessary for all parties involved to define acceptable levels of interference, and at what point interference becomes unacceptable. This notion of field testing has been recently adopted by the Commission in Section 90.353(3) of the Rules as a result of a decision in the so-called "LMS Proceeding," Report and Order, PR Docket No. 93-61, 10 FCC Rcd 4695 (1995).

In addition to obtaining technical data on the potential for harmful or unwanted interference caused by the proposed new service, Cobra believes that the request for unattended operations must be carefully examined. While Cobra does not take issue with "drone" operations per se, it does believe that there are some potential problems with the system proposed by RADAR. The drone type operations proposed by RADAR are fraught with potential

problems, not the least of which involves the control of a malfunctioning transmitter. Because the frequency band in contention is used for public safety purposes, serious harm could be presented by the proposed unattended operations.

On a related issue, RADAR relies heavily on the fact that its proposed system is necessary for safety. Yet, there is no discussion in its Petition of how its unattended device will be powered, and what happens if its battery goes dead or its power supply is otherwise interrupted. In such instances, reliance on the device could have disastrous consequences because it would not be functioning.

Finally, the Commission must also consider the best "home" for a RADAR-type proposal. As previously stated, Cobra is currently providing a system similar to that proposed by RADAR under Part 15 of the Commission's Rules. Cobra's system operates in the very low power Part 15 environment. The type of system proposed by Radar is a modulated system and therefore requires significantly more power than a Part 15 system. RADAR has provided no explanation of what public benefits are derived from the use of the additional power proposed by RADAR, or why such power is necessary. Accordingly, the Commission must consider where the RADAR-type operations would be most suitable.

CONCLUSION

While the RADAR proposal appears meritorious and may deserve further consideration by the Commission, further testing, technical analysis, data, and coordination must be obtained by the Commission before it can proceed to adopt a Notice of Proposed Rulemaking.

Respectfully submitted,

COBRA ELECTRONICS CORPORATION

By: Henry M. Rivera *hm*

Henry M. Rivera  
Larry S. Solomon  
GINSBURG, FELDMAN & BRESS, Chtd.  
1250 Connecticut Avenue, N.W.  
Washington, D/C. 20036-2600  
Telephone: 202-637-9000  
E-mail: lsolomon@gfblaw.com

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CERTIFICATE OF SERVICE

I, Bonnie L. Pincus, a secretary in the law offices of Ginsburg, Feldman & Bress, Chtd., hereby certify that a copy of the foregoing Reply Comments of Cobra Electronics Corporation was served by U.S. mail, first class postage prepaid, on this 31st day of January, 1996, upon the following:

Leonard R. Raish  
George Petrutsas  
Kathryn A. Kleiman  
Fletcher, Heald & Hildreth  
1300 North 17th Street - 11th Floor  
Rosslyn, Virginia 22209  
Radio Association Defending  
Airwave Rights (Radar, Inc.)

Anthony A. Mirabelli  
Vice President, Marketing and Product  
Development  
Uniden America Corporation  
4700 Amon Carter Blvd.  
Ft. Worth, Texas 76155

A. Michael Burnell  
President  
Whistler  
16 Elizabeth Drive  
Chelmsford, Massachusetts 01824

Robert S. Gammenthaler  
Chief Engineer  
ACI  
730 F Avenue  
Suite 200  
Plano, Texas 75074

Dr. R.A. Cassanova  
Head, Advanced Transportation Systems  
Georgia Tech Research Institute  
7220 Richardson Road  
Smyrna, Georgia 30080

  
Bonnie L. Pincus